

The Examiner now argues:

In this case, the portion 1 of the Atsushi can be used to replace the bottom portion of the Hiroshi's device. This combination produces the structure that has conductive layer which covers the bottom and the sides of the projection portion as claimed. This combination is also proper since the connections to carry the signals from the chip are made through the conductor 2.

Applicants respectfully disagree. **Hiroshi** utilizes a plurality of flat conductor plates 12 to provide connection from the IC element 13 to the bottom of the package in view of the intended use of the device in a plastic IC card 21 as represented in Fig. 4 of **Hiroshi**. In contrast, **Atsushi** shows four (4) projections 6 covered with a conductor pattern 2 arranged at each corner of the package, which connect the IC 3 to the bottom of the package. Thus, **Atsushi** utilizes projections for mounting while **Hiroshi** uses a plurality of flat plates for mounting. Thus, there would be no motivation for a person skilled in the art to form the projections taught by **Atsushi** on the flat bottom surface of the device of **Hiroshi**.

Furthermore, as noted in the previous response:

Furthermore, with regard to claims 15 and 20-22, Applicants submit that the recited feature of "said resin projections extending downwards from the mount-surface and laterally extending from at least one of the resin package" is not disclosed in **Hiroshi**.

In the Office Action, the Examiner has urged that:

Hiroshi in fact discloses the resin profusion portions, where the bond wires 15 go through and connect to the bottom conductors. Furthermore, the resin 14 in Hiroshi is an adhesive material and can be considered as a resin tape. This resin layer performs the same function as the tape that disclosed in claim 34. The metallic layer 2 is flush with the surface as mentioned above; see also fig. 4b-5 of Atsushi.

The Examiner is incorrect and has apparently either disregarded or overlooked our argument that Hiroshi fails to teach the feature of resin projection projecting from the bottom surface of the device. What is disclosed in Hiroshi is a resin part projecting from the bottom surface of the chip, but this resin part of Hiroshi does not project from the bottom surface of the device. The device of Hiroshi has a flat bottom surface.

Furthermore, as stated in Applicants' previous response:

In regard to claim 10, Hiroshi discloses that connection member 14 comprising "insulative" resin. Applicants submit that this material is not the same as "resin tape."

Hosomi et al. has been cited for teaching the formation of metallic films 3 comprising a plurality of stacked metallic layers but, like Hiroshi discussed above, fails to teach, mention or suggest the electrode forming a flush surface with the package body, as recited in claim 34, from which claims 37-38 depend.

In particular, it should be noted that Hiroshi has an insulating substrate 11 underneath the chip. Because the resin fills the gap formed in the insulating substrate 11, there appears apparent similarity, **if the insulating substrate 11 is removed**. However, the insulating substrate 11 forms a part of the device of Hiroshi and cannot be removed. Thus, the device of Hiroshi is characterized by a flat bottom surface, contrary to the device of the present invention.

With regard to Atsushi, it is noted that the resin package body of Atsushi does have bottom projections, but the resin package body does not include the semiconductor chip therein. Thus, Atsushi fails to teach the feature of the resin package **sealing the chip**, contrary to the

present invention.

Even if one were to provide the projections of Hiroshi in Atsushi, one skilled in the art would have to use an interposer substrate as an additional member, while such a construction would undoubtedly discourage such a person from combining the teachings of Hiroshi and Atsushi.

Thus, the prior art rejections should be withdrawn.

In view of the aforementioned remarks, claims 2, 5, 7-10, 14, 18, 20-22, 27-41 and 44-50 are in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

ARMSTRONG, WESTERMAN & HATTORI, LLP

*William L. Brooks* Reg. No. 22,631  
William L. Brooks

Attorney for Applicant

Reg. No. 34,129

WLB/mla

Atty. Docket No. **960942A**

Suite 1000

1725 K Street, N.W.

Washington, D.C. 20006

(202) 659-2930



23850

PATENT TRADEMARK OFFICE